

Before the
Federal Communications Commission
Washington, D.C. 20554

In the matter of
Requests of American Tower Corporation and
Global Signal, Inc. to Waive Section 17.47(b)
Of the Commission's Rules
WT Docket No. 05-326

MEMORANDUM OPINION AND ORDER

Adopted: May 11, 2007

Released: May 15, 2007

By the Commission:

I. INTRODUCTION

1. This Memorandum Opinion and Order addresses two separate requests to waive Section 17.47(b) of the Commission's Rules, 47 C.F.R. § 17.47(b), which provides that the owner of any antenna structure which is registered with the Commission and has been assigned lighting specifications pursuant to Part 17 "[s]hall inspect at intervals not to exceed 3 months all automatic or mechanical control devices, indicators, and alarm systems associated with the antenna structure lighting to insure that such apparatus is functioning properly." The requests are from American Tower Corporation ("ATC") and Global Signal, Inc. ("GSI"). Each of the two requests is from a corporation that owns thousands of antenna tower structures that are subject to the lighting requirements set forth in Part 17 of the Commission's Rules.

2. ATC and GSI each argue that the quarterly inspections of antenna monitoring systems mandated by Section 17.47(b) of the Rules have been rendered unnecessary because of technological advancements associated with the particular monitoring system that it employs with respect to many of its antenna structures. They both ask the Commission to waive the rule to permit annual inspections instead for the antenna structures that use these systems. This Memorandum Opinion and Order grants their respective requests for relief.

II. BACKGROUND

3. On May 19, 2005, ATC filed a Request for Waiver ("ATC Waiver Request"). Specifically, for towers utilizing the Eagle Monitoring System ("Eagle System") developed by Flash Technology ("Flash"), ATC seeks permission to perform an annual inspection of the towers in place of

1 47 C.F.R. § 17.47(b).

2 47 C.F.R. Part 17.

3 See Request for Waiver, WT Docket No. 05-326, filed May 19, 2005 (ATC Waiver Request).

the required quarterly inspection.⁴ On November 14, 2005, ATC supplemented its waiver request with additional information regarding the technical characteristics and functioning of the Eagle System.⁵

4. On January 24, 2006, the Wireless Telecommunications Bureau released a Public Notice (DA 06-139) seeking comment on the ATC Waiver Request. Comments were due no later than February 23, 2006, and reply comments were due no later than March 15, 2006. Four parties filed comments in response to the Public Notice: (1) GSI;⁶ (2) Hark Tower Systems, Inc. (“Hark”);⁷ (3) PCIA – the Wireless Infrastructure Association (“PCIA”);⁸ and (4) the Aircraft Owners and Pilots Association (“AOPA”).⁹ ATC and Flash filed Reply Comments.¹⁰ As part of its comments, GSI requests that it also be granted a limited waiver of the quarterly inspection requirements, consistent with ATC’s waiver request, with regard to its towers that are monitored using the HARK System. More recently, the Airspace and Rules Group of the Federal Aviation Administration (FAA) filed a statement in which it said: “We would not be opposed (to) the FCC issuing waivers to 47 C.F.R. Section 17.47(b) provided the applicant can demonstrate a safe and reliable automatic monitoring system with tracking mechanisms to evaluate the remote monitoring technology.”¹¹

III. DISCUSSION

5. Section 1.925 of the Commission’s Rules provides that, with respect to wireless telecommunications services, the Commission may grant a request for waiver if it is shown that: “(i) The underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest; or (ii) In view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.”¹² As discussed below, we grant waivers to ATC and GSI because we find that application of the quarterly

⁴ See *ATC Waiver Request* at pp. 1-10.

⁵ See Letter from Dennis P. Corbett and John W. Barwell, Leventhal Senter & Lerman PLLC, and H. Anthony Lehy, Senior Vice President, Associate General Counsel and Chief Compliance Officer, American Tower Corporation, to Jeffrey S. Steinberg, Deputy Chief, Spectrum and Competition Policy Division, Wireless Telecommunications Bureau (November 14, 2005) (*ATC Supplement*). This additional information was provided in response to a request by the Wireless Telecommunications Bureau’s Spectrum and Competition Policy Division. See Letter from Jeffrey S. Steinberg, Deputy Chief, Spectrum and Competition Policy Division, Wireless Telecommunications Bureau, to Dennis P. Corbett, Leventhal Senter & Lerman PLLC (September 29, 2005).

⁶ Comments and Request for Further Waiver of Global Signal, Inc., WT Docket No. 05-326, filed February 23, 2006 (*GSI Comments and Waiver Request*).

⁷ Comments of Hark Tower Systems, Inc. on Request of American Tower Corp. for Waiver of Quarterly Inspections Required by Part 17, WT Docket No. 05-326, filed February 23, 2006 (*Hark Comments*).

⁸ Comments of PCIA – The Wireless Infrastructure Association on Request of American Tower Corp. for Waiver of Quarterly Inspections Required by Part 17, WT Docket No. 05-326, filed February 23, 2006 (*PCIA Comments*).

⁹ Letter from Aircraft Owners and Pilots Association to Federal Communications Commission, WT Docket No. 05-326, filed February 23, 2006 (*AOPA Comments*).

¹⁰ Reply Comments of American Tower Corporation, WT Docket No. 05-326, filed March 15, 2006 (*ATC Reply Comments*); Comments of Flash Technology on Request of American Tower Corp. for Waiver of Quarterly Inspections Required by Part 17, WT Docket No. 05-326, filed March 15, 2006 (*Flash Reply Comments*). Although Flash’s filing is characterized as “Comments,” it was filed during the reply comment window, and will be treated as “Reply Comments.”

¹¹ Brief Comment of Office of Airspace and Rules, FAA, WT Docket No. 05-326, filed December 4, 2006 (*FAA Filing*).

¹² 47 C.F.R. § 1.925(b)(3).

inspection requirements of Section 17.47(b) to the towers in question is not necessary to serve the underlying purposes of the rule, and grant of the waivers is in the public interest. Based on the evidence presented, strict application of the rule to ATC and GSI would be unduly burdensome and contrary to the public interest.

A. The ATC Waiver Request

6. In its waiver request, ATC states that, as of November 2005, 4,694 of the towers that it owns or operates in the United States, and that are subject to the Commission's lighting requirements, were being monitored utilizing the Eagle System.¹³ ATC asserts that the self-diagnostic functions in the Eagle System are sufficiently robust that quarterly inspection is unnecessary to ensure that the control devices, indicators, and alarm systems on the towers are operating properly. In this regard, ATC maintains that the Eagle System provides the functional equivalent of a continual inspection of control devices from one central location and that users of this system will be alerted to actual and potential problems immediately, in many cases, or at most within 24 hours.¹⁴ Specifically, ATC describes the following features of the Eagle System:

(1) *Alarm notification.* The lighting system installed at the tower site is equipped with Eagle software that contacts the Alarm Response Center (ARC) for every type of "alarm." ATC categorizes these alarms as "major alarms" (beacon/strobe failure, beacon/strobe communication failure, filter failure, low flash energy, consecutive missed flashes, photo cell failure, power failure, and site communication failure) and "minor alarms" (AC power failure, DC power failure, and side marker failure).¹⁵ These alarms have automated escalations within the ARC to ensure proper diagnostics are conducted within a 30 minute window. Within the time frame, the ARC contacts the site and performs full lighting system diagnostics to identify the nature of a lighting failure and to determine if issuance of a Notice to Airmen ("NOTAM") is necessary.¹⁶

(2) *24-hour polling.* The Eagle System is programmed to call each and every site once every 24 hours regardless of the independent on-site lighting system notification. This call is automated and runs a full diagnosis of the lighting system. This diagnosis is completed for all lighting phases (i.e., night, day, twilight) regardless of the time of day. This process ensures the lighting system is both working and communicating properly with the Eagle System.

(3) *Manual contact.* The Eagle System allows for a manual diagnostic review of any tower monitored by the system from any computer.¹⁷

7. The Eagle monitoring system has a Network Operations Call ("NOC") center that is staffed with trained personnel capable of responding to alarms and that has the ability to communicate during limited power outages. Additionally, it is significant that ATC has a backup NOC center in the event of catastrophic failure at the primary NOC center, and specific procedures to follow in the event of

¹³ *ATC Supplement* at 4. ATC indicates that it owns or operates more than 12,000 towers that are subject to the Commission's lighting requirements. *ATC Waiver Request* at 3.

¹⁴ *ATC Waiver Request* at 2.

¹⁵ *ATC Supplement* at 4-5.

¹⁶ Antenna structure owners "shall report immediately by telephone or telegraph to the nearest Flight Service Station or office of the Federal Aviation Administration any observed or otherwise known extinguishment or improper functioning of any top steady burning light or any flashing obstruction light, regardless of its position on the antenna structure, not corrected within 30 minutes." 47 C.F.R. § 17.48(a). See FAA Circular AC-70/7460-1K, Chapter 2, Light Failure Notification.

¹⁷ *ATC Supplement* at 5; *Flash Reply Comments* at 3.

such a catastrophic failure.

8. ATC states that, particularly for towers in remote locations, quarterly inspection imposes a substantial and unnecessary resource burden. ATC contends that without relief it will continue to carry out tens of thousands of quarterly inspections each year without a discernible public interest benefit.¹⁸ In its Reply Comments, ATC further notes that at the time the ATC Waiver Request was filed, ATC had conducted 43,761 quarterly inspections since March 28, 2002, the date on which the Eagle System became “stabilized.” ATC asserts that not a single incident was discovered during any of these quarterly inspections that required the issuance of a NOTAM under FCC rules. It points out that between the filing of ATC’s Request for Waiver and its Reply Comments, an additional 17,477 quarterly inspections were conducted, each without the discovery of any NOTAM-worthy event.¹⁹

9. Flash, PCIA, GSI, and Hark support the ATC Waiver Request. Flash was founded in 1969 and developed the Eagle System that is the basis of the ATC Waiver Request. In its comments, Flash corroborates ATC’s description of the Eagle System and supports ATC’s argument that the system’s features render quarterly inspections unnecessary. PCIA is a trade association representing the wireless telecommunications and broadcast infrastructure industry, whose members own or manage more than 50,000 towers that support wireless services across the country.²⁰ PCIA supports ATC’s Request for Waiver on the grounds that the underlying purpose of Section 17.47(b) is served “just as well” by ATC’s “alternative approach.”²¹ GSI, an owner and operator of towers, supports the ATC Waiver Request,²² and also asks for a similar waiver based on its own use of the HARK System.²³ Hark, a supplier of obstruction light alarm monitoring equipment to the wireless communications industry, also urges the Commission to grant the ATC Waiver Request if the grant is not limited to the one brand of monitoring equipment used by ATC.²⁴

10. AOPA, representing over 406,000 general aviation pilots nationwide, opposes ATC’s Waiver Request. AOPA indicates that it favors introduction and use of new technologies, but believes quarterly inspections should continue at this time until these new technologies have been thoroughly evaluated. AOPA emphasizes that it is concerned about safety, and indicates that lack of tower lighting has contributed to numerous fatal aircraft crashes.²⁵ AOPA therefore asks the Commission first to track more closely ATC’s responsiveness to outages before granting relief from any inspection requirements.²⁶ In addition, AOPA alleges generally [without more] that “ATC’s history of non-compliance with lighting and inspection requirements” provides a reason for denying its request.²⁷

¹⁸ *ATC Waiver Request* at 2.

¹⁹ *ATC Reply Comments* at 2.

²⁰ *PCIA Comments* at 1.

²¹ *Id.* at 2.

²² *GSI Comments and Waiver Request*.

²³ *Id.*

²⁴ Hark further recommends that Section 17.47(b) be modified to relieve inspection requirements for all tower companies using a sophisticated monitoring system and a network operations control (“NOC”) center. *Hark Comments* at 4. As discussed below, this issue has been raised in a petition for rulemaking that is currently before the Commission.

²⁵ *AOPA Comments* at 1.

²⁶ *Id.*

²⁷ *Id.*

11. We find that uncontested evidence submitted in the record by ATC, and corroborated by Flash, establishes that quarterly inspections are unnecessary for those towers using ATC's Eagle monitoring system. Features of this system provide sufficiently robust monitoring of the control devices, indicators and alarm systems so as to render quarterly inspections unnecessary, thus warranting grant of ATC's waiver request. We conclude that ATC is operating a safe and reliable monitoring system with tracking mechanisms to evaluate the remote monitoring technology.²⁸ Indeed, such advanced technology provides the benefits of more rapid response where there has been a lighting failure, and thus the public interest is served with respect to aircraft safety. In addition, granting ATC's request for waiver will save ATC millions of dollars and thousands of person-hours that are unnecessarily spent on quarterly inspections annually where it has deployed this advanced technology.

12. We do not find AOPA's general objections persuasive in light of the record before us. AOPA suggests that the technology ATC uses, as well as ATC's record utilizing that technology, require further evaluation before the Commission should grant ATC relief. However, as discussed above, ATC and Flash have provided a detailed description of the relevant features of the Eagle System, and ATC further shows the system's successful operation at thousands of towers over four years without incident. We believe this evidence amply establishes the system's efficacy and reliability, without need for further consideration. Moreover, AOPA provides no detail regarding ATC's alleged "history of non-compliance with lighting and inspection requirements" or its relevance to ATC's Waiver Request.²⁹ We therefore find that ATC has established good grounds for the waiver that it requests.

B. The GSI Waiver Request

13. GSI requests, consistent with ATC's waiver request, that the Commission adopt a further limited waiver of the quarterly inspections requirement to allow all GSI towers that utilize the Hark System to be inspected on an annual, instead of quarterly, basis. GSI owns or operates more than 11,000 towers in the U.S., of which 3,350 are subject to the Commission's lighting requirements. Of these 3,350 lit towers, 2,975 are monitored using the HARK System, and GSI planned to upgrade the remainder of its lit towers in 2006.³⁰

14. GSI states that today's remote inspection technology, and the HARK System in particular, is vastly superior to the technology that existed when on-site quarterly inspections were first mandated in the 1940s and 1950s.³¹ GSI provides a comprehensive exhibit that completes its waiver request, and includes similar information to that provided in the *ATC Supplement*. Specifically, the HARK System, which is used by GSI, receives and reports alarms that are activated when the self-diagnostic functions of the obstruction lighting systems determine that there is a lighting malfunction. These monitoring devices are microcomputer-based and sophisticated. Features of these devices include programmable delays to prevent false alarms, alphanumeric labeling for input and output circuits to remove confusion as to the origin of alarms, and the capability of handling a variety of two-way communications to the NOC center.³² In addition to the alarm contact inputs, the HARK System samples

²⁸ See *FAA Filing*.

²⁹ We note that on January 16, 2001, the Commission issued a Notice of Apparent Liability (NAL) against ATC for 36 violations of Sections 17.4(a), 17.4(a)(1), 17.4(g), 17.45, and 17.57 of the Rules. ATC entered into a Consent Decree with the Commission on August 2, 2001, which terminated the investigations detailed in the NAL. The Consent Decree required ATC to make a voluntary contribution to the U.S. Treasury of \$300,000 and abide by a Part 17 Compliance Plan. Since 2001, ATC has not had a significant history of non-compliance with the Part 17 rules.

³⁰ *GSI Comments and Waiver Request* at 1.

³¹ *GSI Comments and Waiver Request* at 2.

³² *GSI Comments and Waiver Request* at 3.

the state of photocells at the tower sites to determine whether the lighting systems are operating in the correct mode for the time of day. Alarms from GSI's sites are transmitted immediately, acknowledged by the NOC center computer system, and then reviewed by NOC center personnel located in Sarasota, Florida. NOC center personnel are able to connect with the alarmed site on demand to interrogate the status of the site. To ensure that the communications link between each tower's controller device and GSI's NOC center is operational, GSI's NOC center system initiates an outbound connection to each tower's monitoring system at least once each day to test the communications link. If this redundancy results in a failed contact, a NOTAM is opened out of an abundance of caution. As a practical matter, the HARK System notifies GSI within minutes of (i) the occurrence of any incident that would require opening a NOTAM; and/or (ii) any equipment failure that could be discovered during an on-site inspection. GSI has site equipment capable of interrogation on demand and the ability to communicate during limited power outages. Additionally, GSI has a backup NOC center in the event of catastrophic failure at the primary NOC center, and specific procedures to follow in the event of such a catastrophic failure. On the basis of the entirety of the filing, GSI characterizes its system as similar to ATC's and seeks the same waiver as ATC.

15. GSI further argues that the quarterly inspections impose a substantial and unnecessary burden on its resources. To meet the quarterly inspection requirements, GSI must send a trained technician to visit each of 3,350 sites four times per year for a total of 13,400 site visits annually. Many of these tower sites are in remote locations. GSI spent approximately \$2.01 million in 2005 to conduct these visits. GSI has conducted 24,153 on-site quarterly inspections at GSI/Hark System towers since October 2001. As with ATC's antenna structures using the Eagle System, not a single NOTAM-worthy event was discovered by GSI during any of these inspections. Thus, GSI contends, these inspections appear to yield no tangible benefit.³³

16. Of the other commenters and reply commenters, only ATC references GSI's waiver request. ATC did not take a position on the merits of GSI's waiver request, but expressed a preference that it be considered in a separate proceeding so as not to delay action on ATC's request.³⁴

17. As with ATC, we conclude, based upon uncontested evidence submitted in the record by GSI, that certain aspects of the HARK System provide sufficiently robust monitoring of the control devices, indicators and alarm systems so as to render quarterly inspections unnecessary, thus warranting grant of GSI's waiver request. We conclude that GSI is operating a safe and reliable monitoring system with tracking mechanisms to evaluate the remote monitoring technology.³⁵ As with ATC's system, GSI's use of advanced technology promotes rapid response to lighting failures with attendant aircraft safety benefits. In addition, granting GSI's request for waiver will save GSI millions of dollars and thousands of person-hours that are unnecessarily spent on quarterly inspections annually where it has deployed this advanced technology.

IV. CONCLUSION

18. For the reasons discussed above, we waive Section 17.47(b) to allow ATC and GSI, for their towers monitored using the Eagle and HARK systems, to conduct inspections required by that section on an annual, rather than a quarterly, basis. As described in detail in the record, these monitoring systems reliably diagnose problems, including any failures of control devices, indicators and alarm systems, within real time, and therefore render strict application of the rule unnecessary to serve its underlying purpose. Moreover, these waivers will relieve ATC and GSI of the burden of performing

³³ *GSI Comments and Waiver Request* at 2.

³⁴ *ATC Reply Comments* at 2.

³⁵ *See FAA Filing*.

thousands of unnecessary quarterly inspections. In addition, granting these waiver requests will encourage other tower owners to invest in similar state-of-the-art technologies so that they too will become capable of continuous monitoring of both their lighting systems and control devices.

19. We note that PCIA has recently filed a Petition for Rulemaking in which it requests, among other things, to amend Section 17.47(b) of the rules so as to exempt systems using NOC-based monitoring technology from the quarterly inspection requirement.³⁶ PCIA's Petition for Rulemaking was placed on Public Notice to allow interested persons to file statements opposing or supporting it.³⁷ This petition is currently pending before the Commission, and the waivers which we grant today are subject to any rule changes that we may promulgate in that proceeding. In the interim, the Commission or its staff will evaluate requests by other tower owners using monitoring systems with characteristics similar to the Eagle and HARK systems for similar waivers.

V. ORDERING CLAUSE

20. Pursuant to Sections 4(i), 303(q), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(q), 303(r), and pursuant to Section 1.925 of the Commission's Rules, 47 C.F.R. § 1.925, the Requests for Waiver filed by ATC and GSI ARE GRANTED.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

³⁶ Petition for Rulemaking, RM-11349, In the Matter of Amendments to Modernize and Clarify Part 17 of the Commission's Rules Concerning Construction, Marking and Lighting of Antenna Structures, filed by PCIA – The Wireless Infrastructure Association on September 12, 2006.

³⁷ Consumer & Governmental Affairs Bureau Reference Information Center Petition for Rulemakings Filed, *Public Notice*, Report No. 2794 (rel. October 30, 2006). Comments were due on November 29, 2006.